****DRAFT****

Fire Regime Condition Class (FRCC) Interagency Handbook Reference Conditions

Modeler: Ron Masters **Date: 5-12-04** **PNVG Code: XTMB1+**

Potential Natural Vegetation Group: Cross Timbers

Geographic Area: Central parts of Texas, Oklahoma and Kansas

Description: Dominated by Post oak (*Quercus stellata*) and to a lesser extent blackjack oak (*Q. marilandica*), in the eastern extent hickory (*Carya* spp.) and black oak (*Quercus velutina*) may be a constituent and also occasionally elm (*Ulmus americana*). Open understory and openings are dominated by big bluestem (*Andropogon gerardii*), little bluestem (*Schizachyrium scoparium*) and Indiangrass (*Sorghastrum nutans*) and various annual and perennial forbs with prevalence dictated by stand density and overstory canopy cover. Cross Timbers is within a landscape matrix of tallgrass prairie.

Fire Regime Description: Fire regime group I, with frequent surface fires.

Vegetation Type and Structure

Class*	Percent of Landscape	Description
A: post replacement	15	Oak reproduction (often coppice) to 15' tall. Community of forbs and perennial grasses. More persistent on shallow soils. Openings may be small to extensive and have scattered live trees.
B: mid-seral closed	14	Mid-seral with closed canopy (>60%) sapling to pole-sized oak with little or no herbaceous understory. Often coppice origin.
C: mid- seral open	29	Mid-seral woodland/savanna overstory with perennial grasses. Cover <60%.
D: late- seral open	32	Mid-seral woodland/savanna oak overstory with perennial grasses. Cover <60%.
E: late- seral closed	10	Late-seral, closed canopy (>60%) oak dominated overstory community. Little to no herbaceous cover and few shrubs.
Total	100	

*Formal codes for classes A-E are: AESP, BMSC, CMSO, DLSO, and ELSC, respectively.

Fire Frequency and Severity

Fire Severity	Fire Frequency (yrs)	Probability	Percent, All Fires	Description
Replacement Fire	208	.005	4	Late growing season fires occurring in drought years
Non-Replacement Fire	3.8	.26	96	Primarily surface fire in all classes. Some mosaic fire.
All Fire Frequency*	3.7	.27	100	

*All Fire Probability = sum of replacement fire and non-replacement fire probabilities. All Fire Frequency = inverse of all fire probability (previous calculation).

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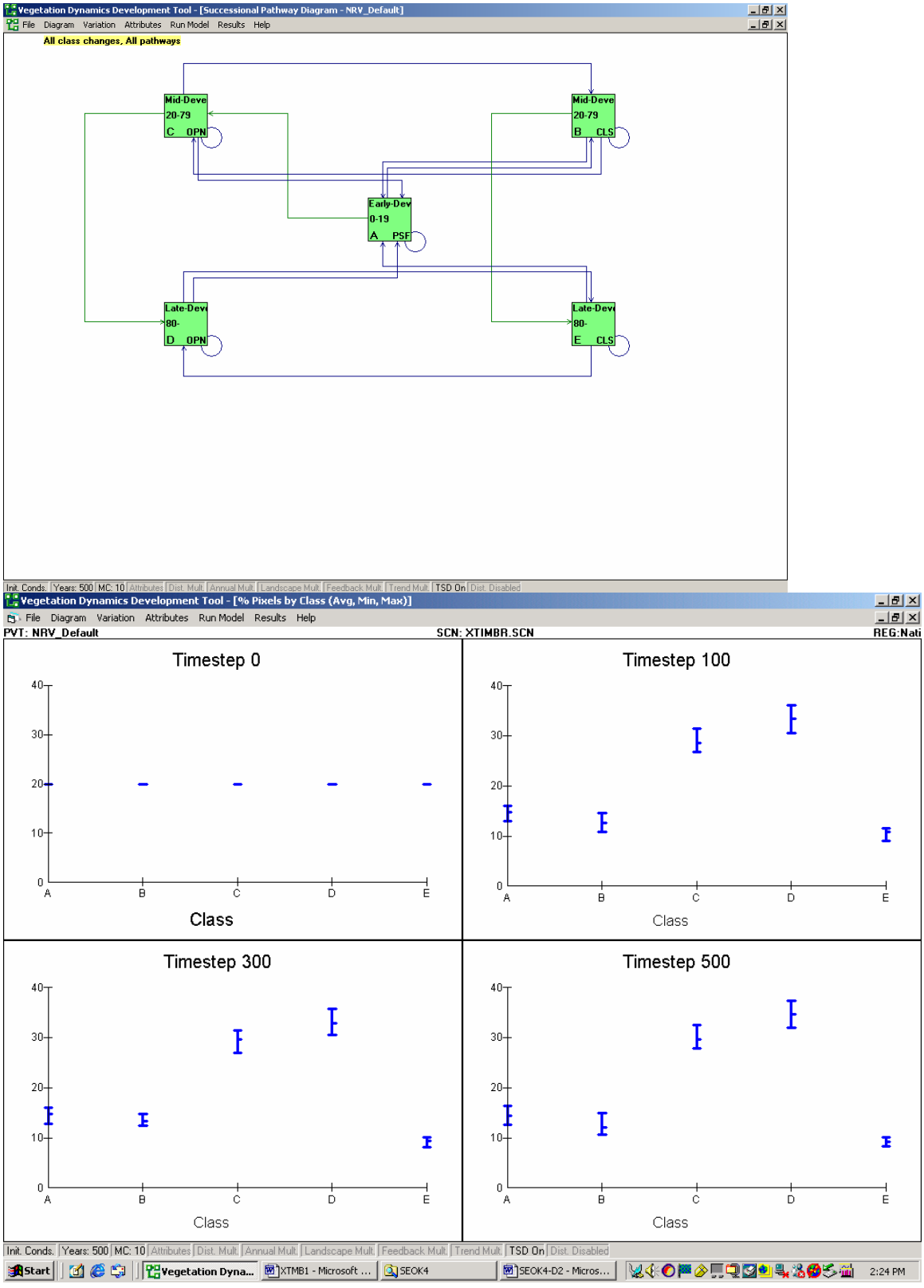
Sam Fuhlendorf, Assistant Professor, Oklahoma State University

VDDT File Documentation
Include screen captures (print-screens) from any of the VDDT graphs that were used to develop reference conditions.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File Diagram Variation Attributes Run Model Results Help
All class changes, All pathways
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C OPN
Mid-Deve
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B CLS
Early-Dev
0-19
A PSF
Late-Dev
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File Diagram Variation Attributes Run Model Results Help
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Class
Init. Conds. Years: 500 MC: 10 Attributes Dist. Mult. Annual Mult. Landscape Mult. Feedback Mult. Trend Mult. TSD On Dist. Disabled
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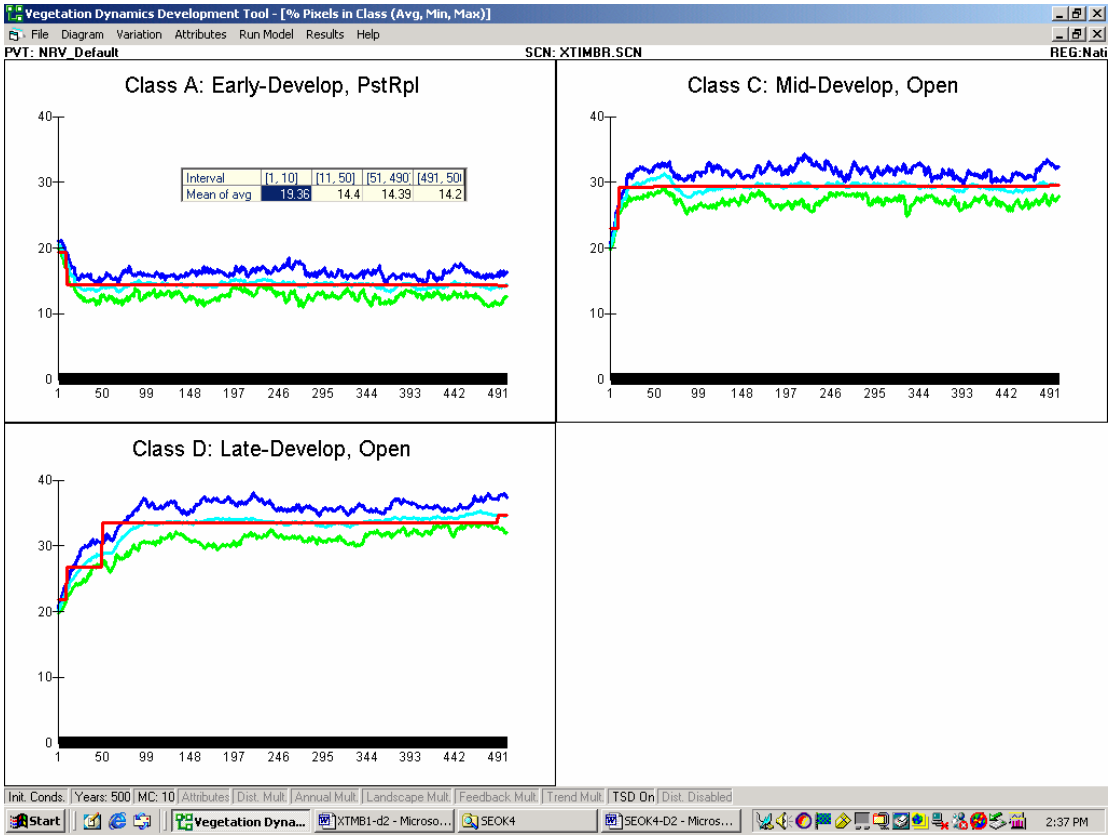
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Mean of avg 19.36 14.4 14.39 14.2
Class C: Mid-Develop, Open
Class D: Late-Develop, Open
Init. Conds. Years: 500 MC: 10 Attributes Dist. Mult. Annual Mult. Landscape Mult. Feedback Mult. Trend Mult. TSD On Dist. Disabled
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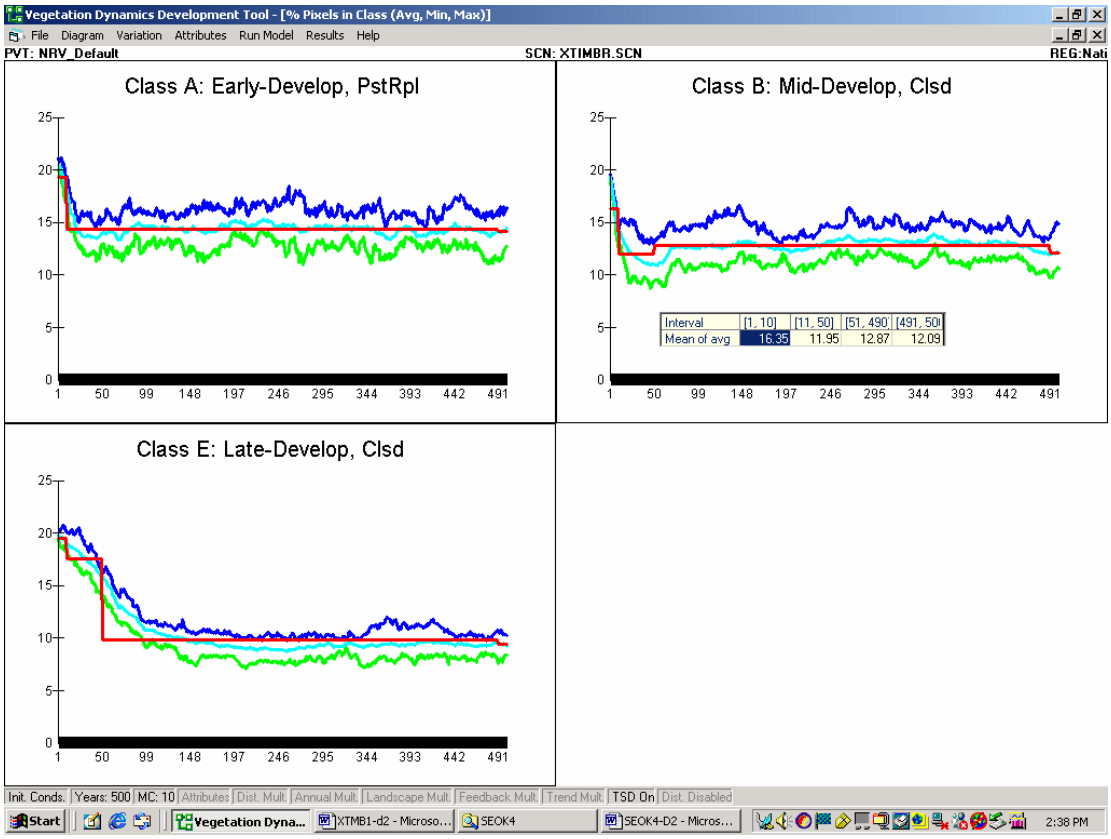
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Class A: Early-Develop, PstRpl
Class B: Mid-Develop, Clsd
Interval [1, 10] [11, 50] [51, 490] [491, 50
Mean of avg 16.35 11.95 12.87 12.09
Class E: Late-Develop, Clsd
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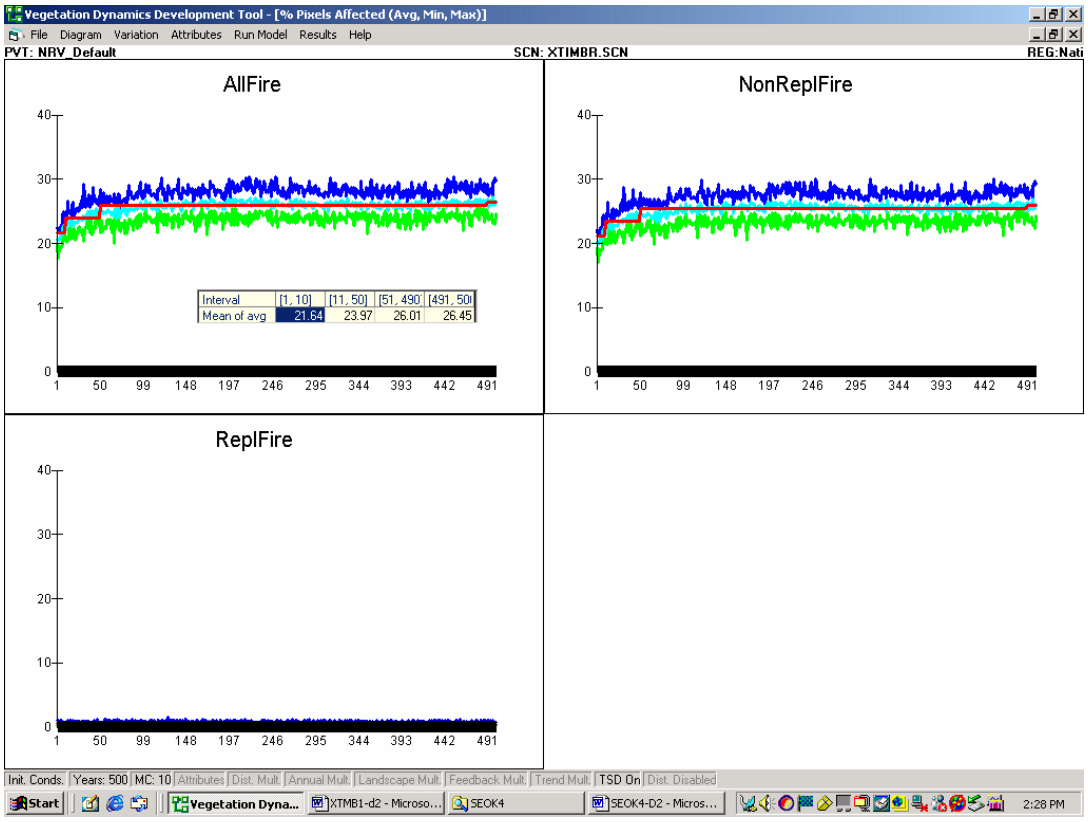
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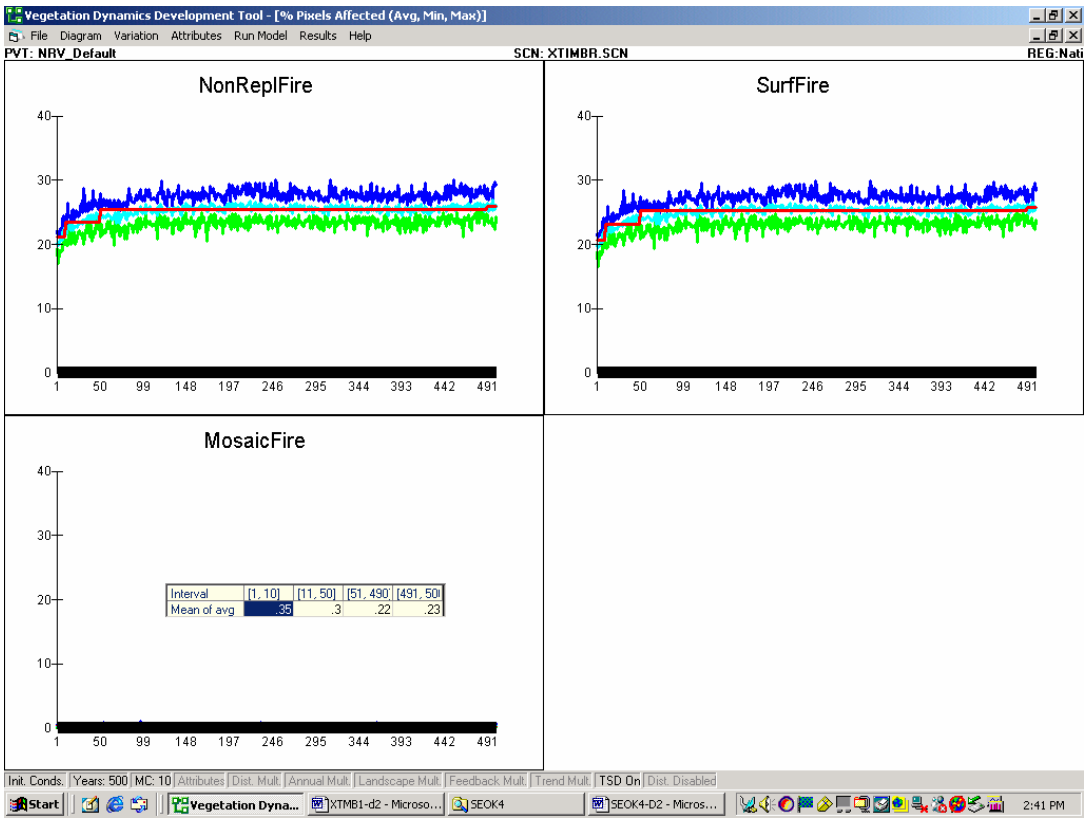
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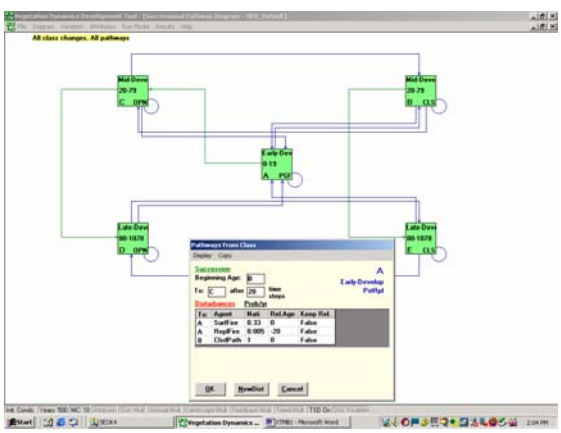

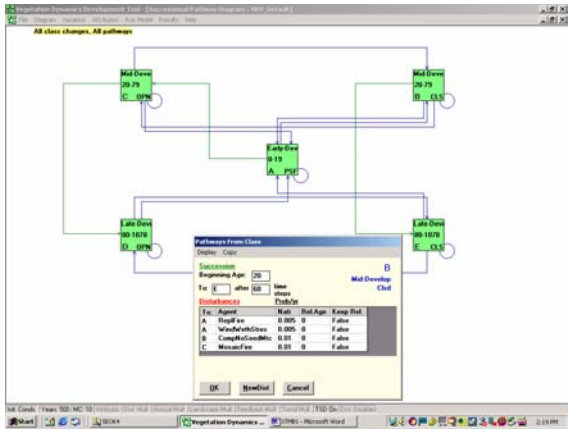

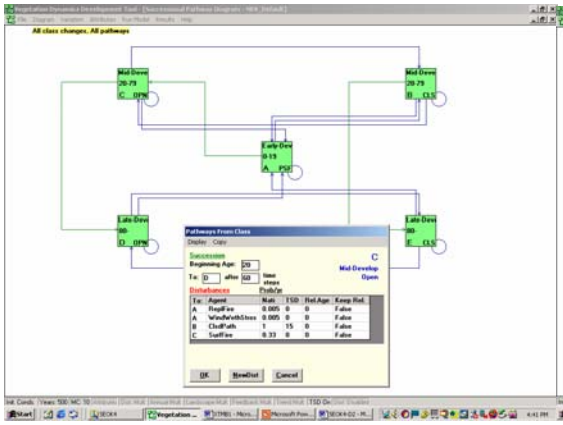

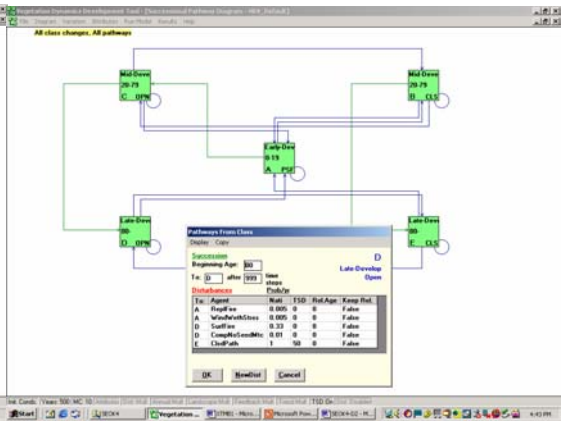

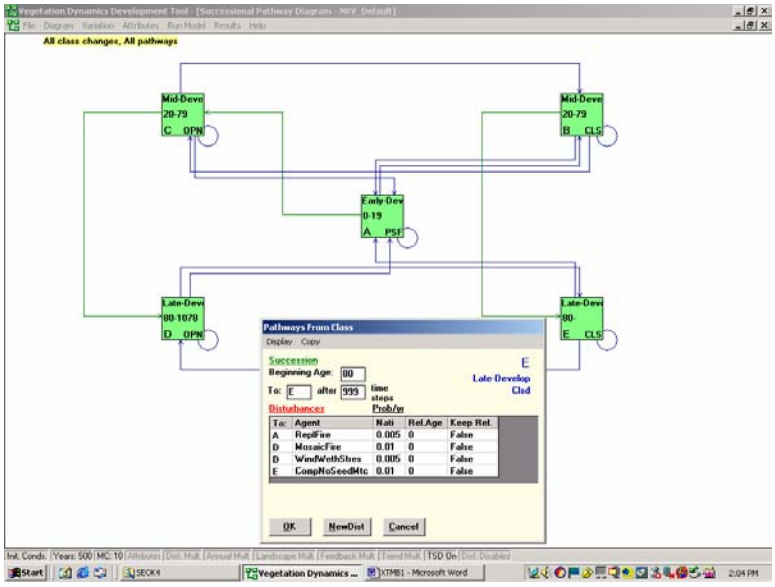
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File Diagram Variation Attributes Run Model Results Help
All class changes, All pathways
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